

ABSTRACT

A data processing system is provided which enables an operator to rapidly perform object detection, identification, recognition, and location using remote imagery from Mini Unmanned Air Vehicles when sensor performance is severely limited due to size, weight, and power constraints. The system receives down linked images from an Unmanned Air Vehicle as well as vehicle geographic position and sensor attitude data. The imagery is processed on the ground using detection, identification, recognition and moving target detection algorithms to eliminate clutter and preselect potential objects of interest. The objects of interest are identified by the operator from the preselected list of objects automatically presented to him. The target location is simultaneously calculated for selected objects using the down linked vehicle location and sensor pointing angle and displayed to the operator.